

TITLE: Astrophysical Observations with the HEROES Balloon-borne Payload

PRESENTATION TYPE: Research Contributed

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ABSTRACT BODY:

Abstract (2,250 Maximum Characters): The High Energy Replicated Optics to Explore the Sun (HEROES) payload flew on a balloon from Ft. Sumner, NM, September 21-22, 2013. HEROES is sensitive from about 20-75 keV and comprises 8 optics modules, each consisting of 13-14 nickel replicated optics shells and 8 Xenon-filled position-sensitive proportional counter detectors. HEROES is unique in that it is the first hard X-ray telescope that will observe the Sun and astrophysical targets in the same balloon flight. Our astrophysics targets include the Crab nebula and pulsar and the black hole binary GRS 1915+105. In this presentation, I will describe the HEROES mission, the data analysis pipeline and calibrations, and preliminary astrophysics results.

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